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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/921,364	08/02/2001	Lucius M. Sherwin	TI-30661	6223

23494 7590 08/01/2003

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EXAMINER

BROWN, KHALED

ART UNIT	PAPER NUMBER
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2877

DATE MAILED: 08/01/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/921,364

Applicant(s)

SHERWIN, LUCIUS M.

Examiner

Khaled Brown

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 August 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-12 and 15-17 is/are rejected.
- 7) ☒ Claim(s) 4, 13 and 14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

Claims 1-3,5-12 and 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsukazaki et al (US 5837094) in view of Hoekstra et al (US 5542146).

Re clms 1,5-8, 15-16: Tsukazaki et al discloses a particle detection and removal system comprising: a sample port (Tsukazaki et al 12), a vacuum source having a vacuum port (inherent), and a particle sensor connected between the vacuum source and the sample port (Tsukazaki et al 15). However, Tsukazaki et al does not specifically disclose the structure of the diameter of the sample port is smaller than a diameter of the vacuum port. Hoekstra et al discloses that in a vacuum system the diameter of a sample port (Tsukazaki et al 26) is smaller than a diameter of a vacuum port (Tsukazaki et al 162) because it increases suction power. Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to have the diameter of the sample port be smaller than the diameter of the vacuum port in the apparatus of Tsukazaki et al as disclosed by Hoekstra et al because it would increase suction power.

Re clms 2,11,12: modulating vacuum pressure (Hoekstra et al Fig 2)

Re clms 3,10: venturi boost and hose diameter (an obvious matter of design choice since any means of modulating vacuum pressure would work)

Re clm 9: a portable cart (Hoekstra et al Fig 1)

Allowable Subject Matter

Claims 4,13 and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: the prior art of record fails to disclose or suggest a solenoid in conjunction with the rest of the claimed subject matter.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Bennett et al 5367139.

Note: No IDS has been filed to date in the instant case.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khaled Brown whose telephone number is 703-306-5738. The examiner can normally be reached on M-F 8:30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank G. Font can be reached on 703-308-4881. The fax phone numbers

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for the organization where this application or proceeding is assigned are 703-308-~~7722~~
for regular communications and 703-308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or
proceeding should be directed to the receptionist whose telephone number is 703-308-
1782.

KB
July 26, 2003

A handwritten signature in black ink, appearing to read "Frank Font". The signature is stylized with a cursive script.

Frank Font
Supervisory Patent Examiner
Art Unit 2877